FIG. 1

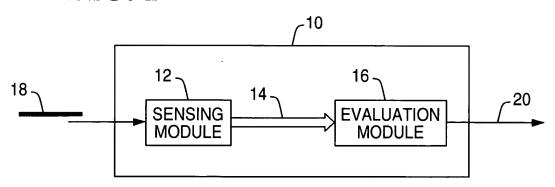
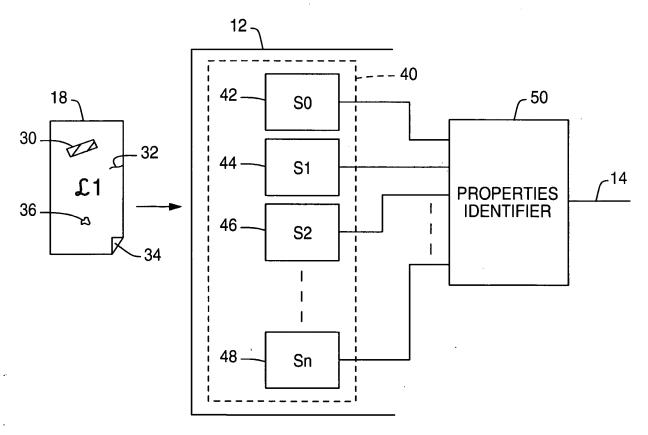
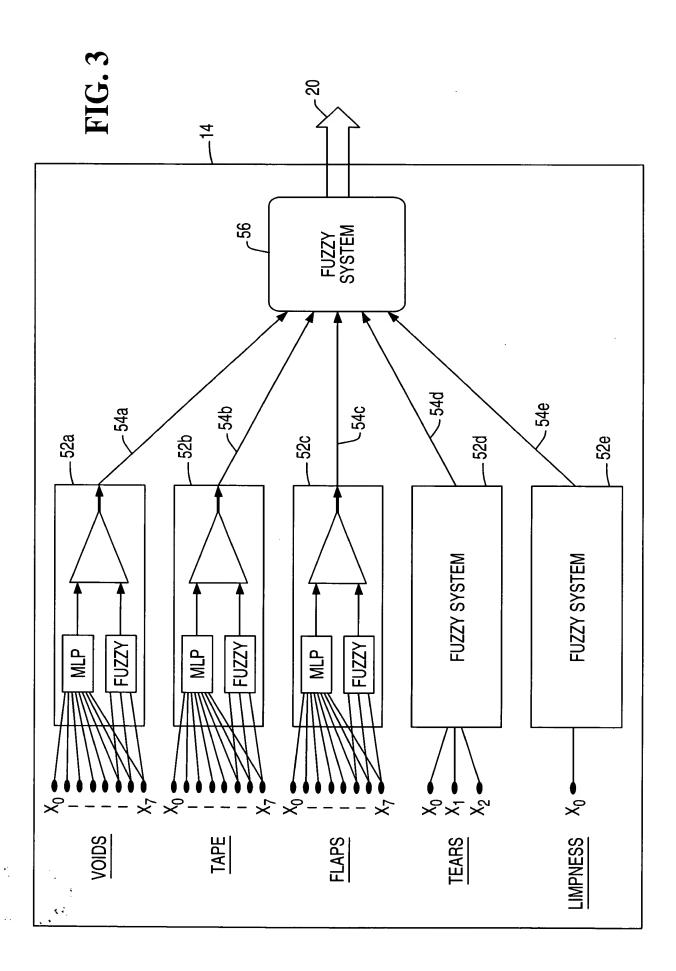
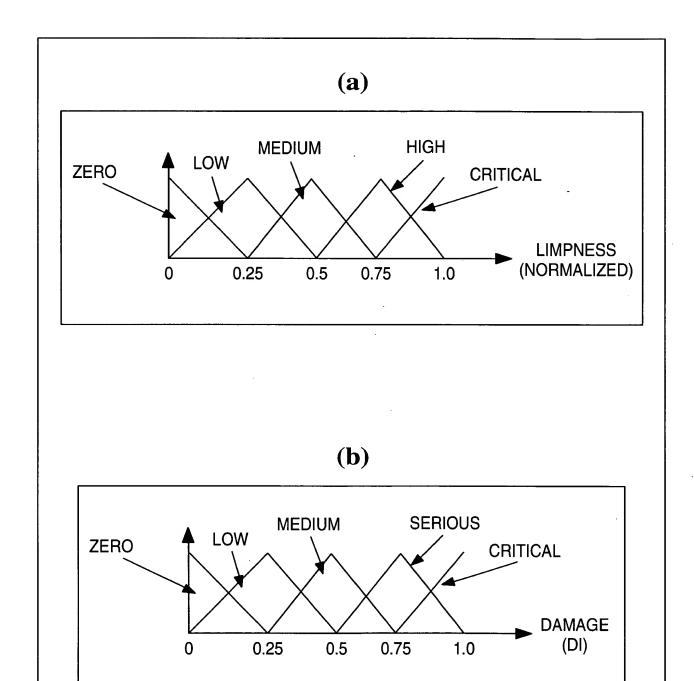


FIG. 2





**FIG. 4** 

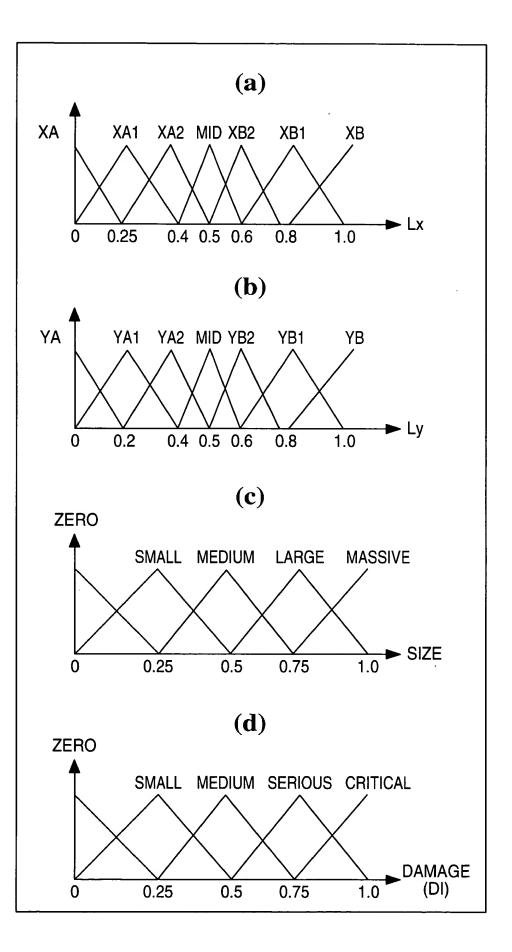


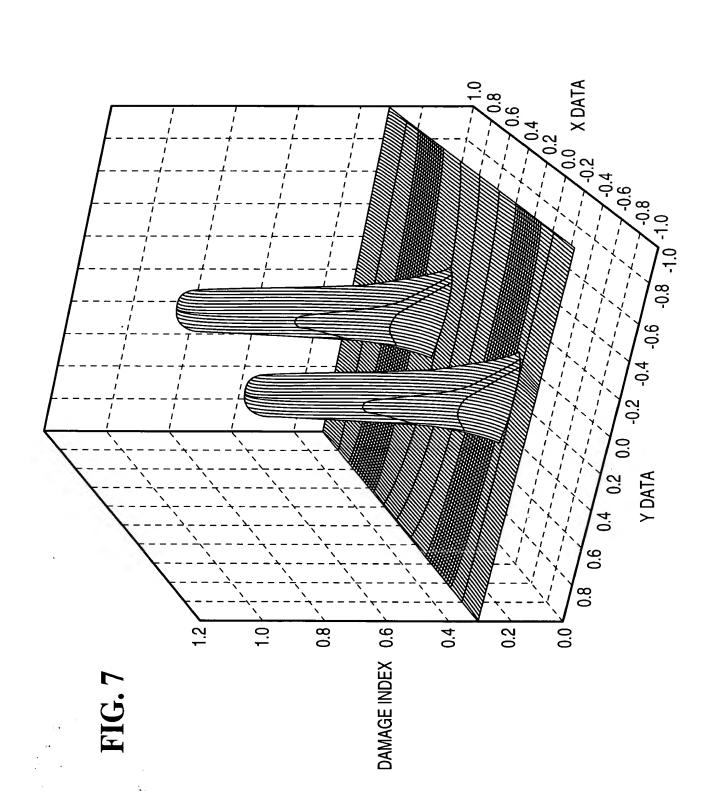
**FIG. 5** 

ANTECEDENT	CONSEQUENT	CF	W
IF LIMPNESS IS ZERO THEN	DI IS ZERO	1.0	0.0
IF LIMPNESS LOW THEN	DI IS LOW	1.0	0.2
IF LIMPNESS MEDIUM THEN	DI IS HIGH	1.0	0.7
IF LIMPNESS HIGH THEN	DI IS HIGH	0.4	0.9
IF LIMPNESS HIGH THEN	DI IS CRITICAL	0.6	
IF LIMPNESS CRITICAL	DI IS CRITICAL	1.0	1.0

CF = CONFIDENCE FACTOR AND W = WEIGHT

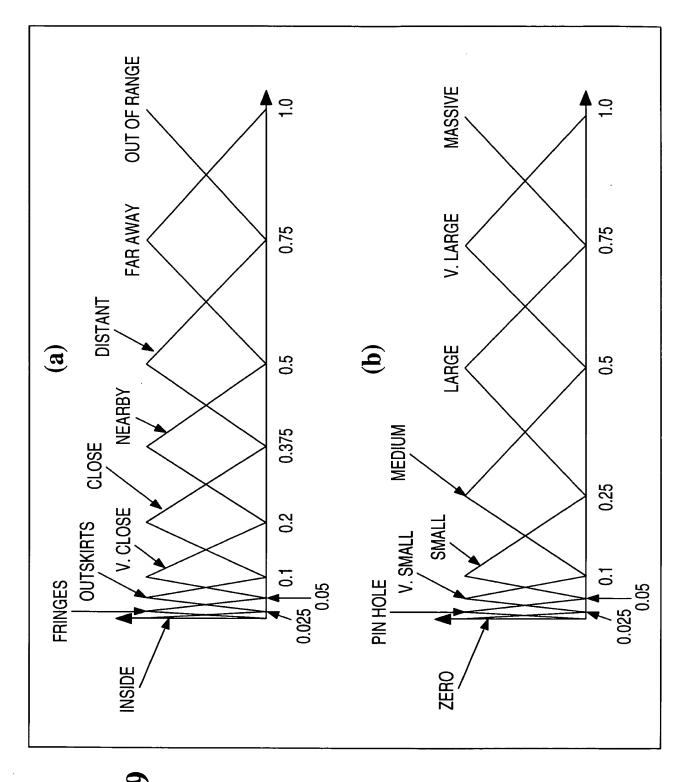
FIG. 6





COMBINING ALGORITHM FUZZY DATA TO MODIFY MLP OUTPUT -84 7 10 13 16 19 22 SI 0.8 **COMBINING** -52a,b.c \$13 7 10 13 16 19 22 72 0.6 0.8 89 FUZZY MP 60 66 -62a -62h × ×2 X × ×3 × × X<sub>7</sub> 62f – 62d -62g -62c\_ 62e -62b

FIC &



**FIG. 9** 

FIG. 10

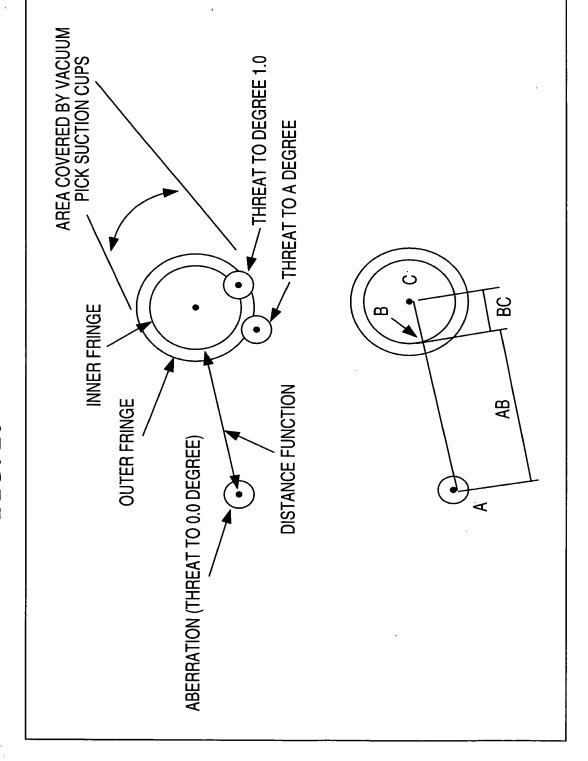
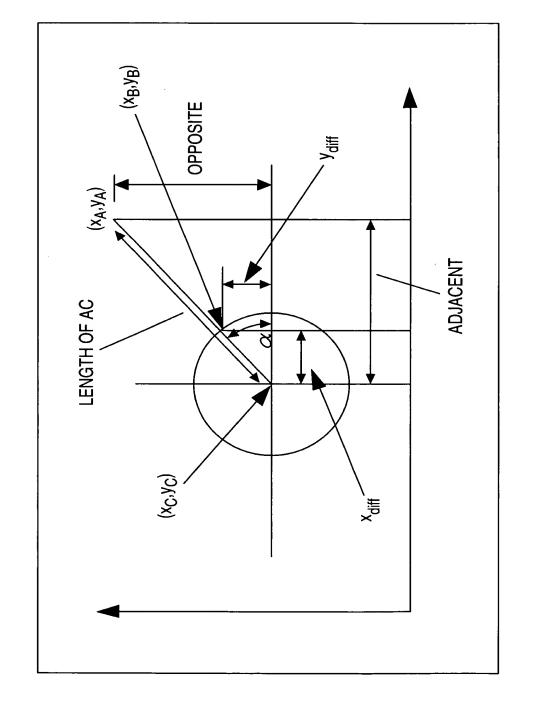
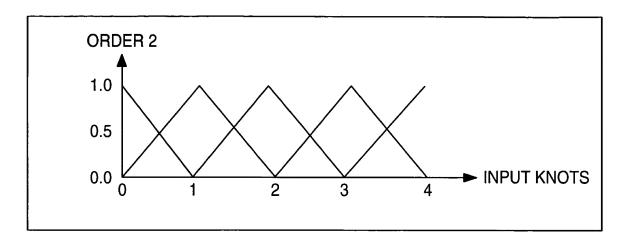


FIG. 11



**FIG. 12** 



**FIG. 13** 

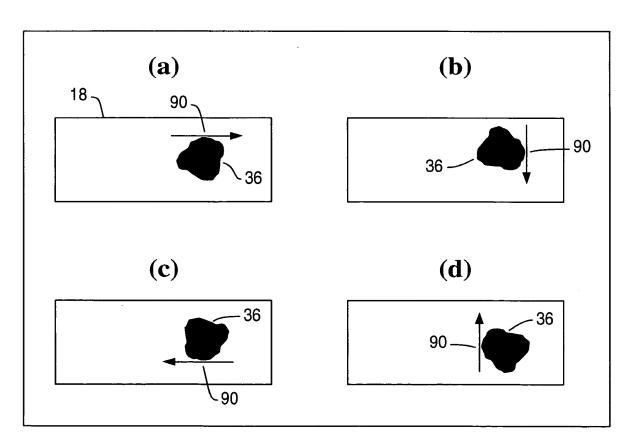


FIG. 14

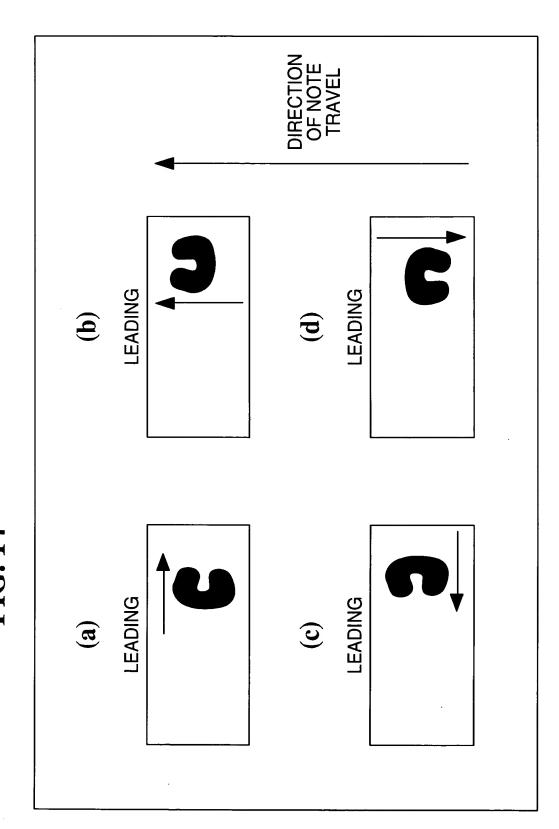
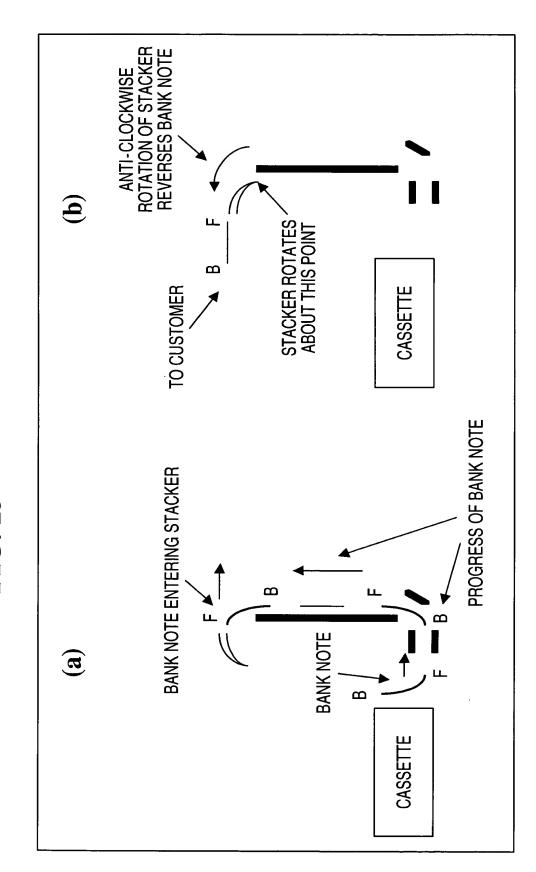
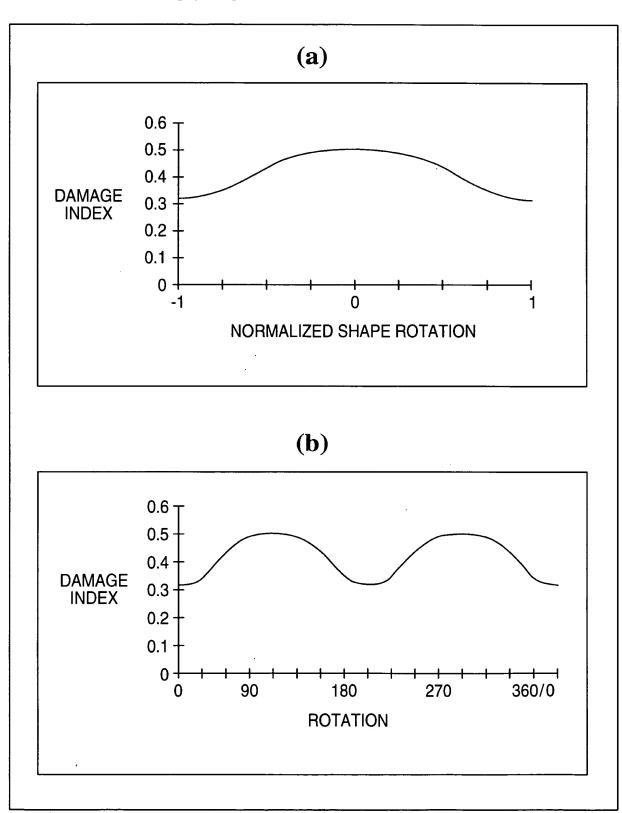


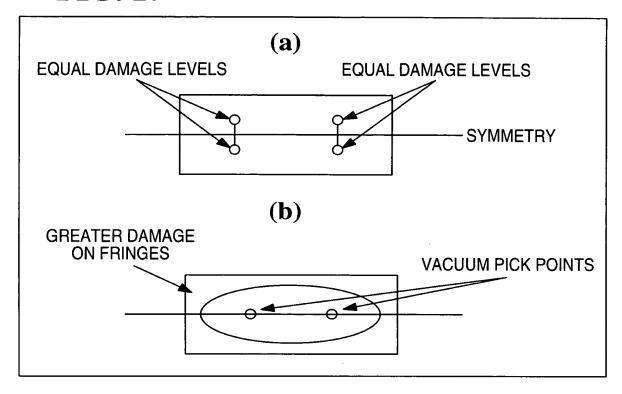
FIG. 15



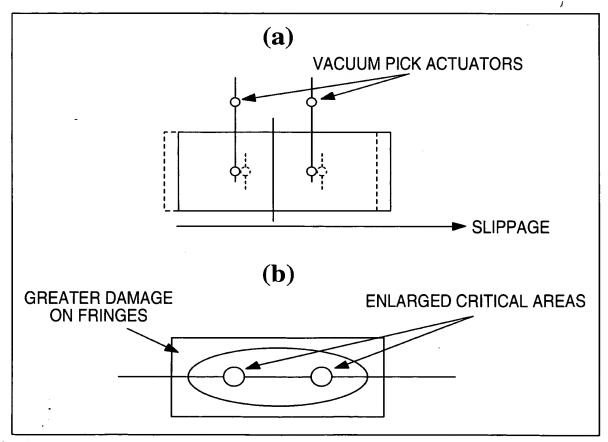
**FIG. 16** 

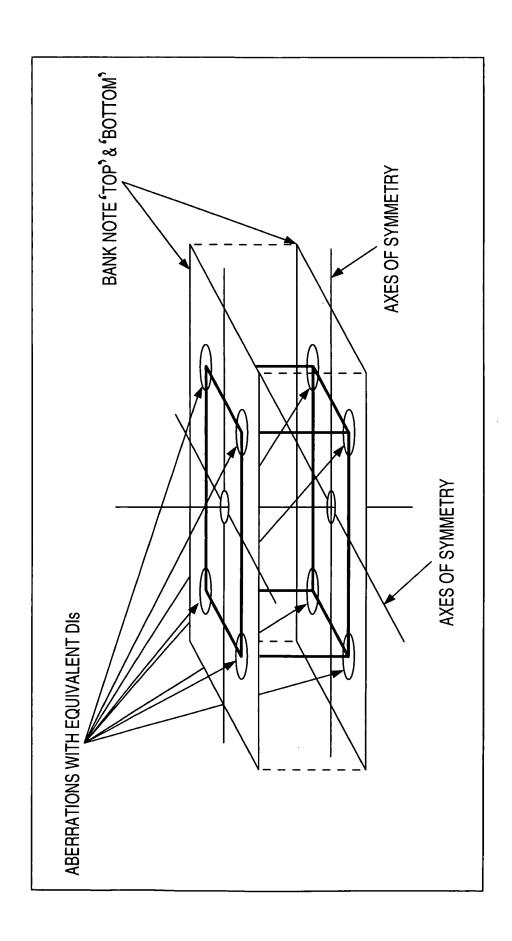


**FIG. 17** 



**FIG. 18** 





**FIG. 20** 

